

# ON SOME NEW OR LITTLE-KNOWN AUSTRALIAN FISHES.

By J. DOUGLAS OGILBY.

(Plates XXIX–XXX.)

IN the following pages there will be found descriptions of a new genus and five new species of Queensland Fishes, as well as redescrptions of three others, which for some reason are interesting. They are as follow:—

1. *PHYSODON TAYLORI* sp. nov. *Galeidæ*.
2. *MELANOTÆNIA MACCULLOCHI* sp. nov. *Atherinidæ*.
3. *PSENES HILLII* sp. nov. *Stromateidæ*.
4. *PLECTORHYNCHUS MULTIVITTATUS* (Macleay). *Pomadasidæ*.
5. *REGANICHTHYS MAGNIFICUS* gen. et sp. nov. ? *Pempheridæ*.
6. *ASTERROPTERYX SEMIPUNCTATUS* Rüppell. *Elcotridæ*.
7. *BLENNIUS INTERMEDIUS* sp. nov. *Blenniidæ*.
8. *SPHEROIDES MULTISTRIATUS* (Richardson). *Tetraodontidæ*.

The three beautiful illustrations in this paper were kindly drawn by Mr. Allan R. McCulloch, of the Australian Museum, Sydney, to whom we here tender our grateful thanks.<sup>1</sup>

## FAMILY GALEIDÆ.

### *PHYSODON TAYLORI* sp. nov.

*Type locality*:—Townsville, N.Q.

Body moderately slender and compressed, the vent slightly premedian, its contour between the eye and the first dorsal convex. Head about one eighth wider than deep, its length to the first gill-slit 6.1, to the last 4.8 in the total length. Snout rather short and obtusely pointed, depressed, its preoral length 1.33 time the ramal length of the upper jaw, a little more than the width of the mouth, and one tenth less than the space between the eye and the first gill-slit. Oro-narial interspace half the distance of the nostril from the tip of the snout, which is one sixth more than the internarial width, 1.2 in the space between the nostril and the angle of the mouth, and 1.55 in that between the outer angles of the nostrils. Width of nostril a little less than the eye-diameter; two small triangular valvules, the outer the larger, near the inner angle of the nostril anteriorly. Eye vertically elliptical, three tenths nearer to the mouth than to the nostril, and midway between the tip of the snout and the first gill-slit, its

<sup>1</sup> I have great pleasure in supplementing Mr. Ogilby's remarks. From time to time the Queensland Museum has been indebted in more than one respect to Mr. McCulloch, and I wish very heartily to record my appreciation of his valuable assistance.—R. HAMLYN-HARRIS.

horizontal diameter 4.15 in the preoral length and 3.85 in the width of the mouth; interocular width one tenth more than the preoral length. Angle of upper jaw touching a line drawn between the anterior borders of the eyes. Labial folds moderately developed, that of the lower jaw twice as long as the upper fold, which is about one fourth of the ramal length; a groove behind the angle of the mouth.

Teeth rather stout and moderately oblique, those of the upper jaw with the tip straight, of the lower with the tip bent somewhat inwards, each with a deep notch behind; lower jaw without, upper with a median unpaired tooth.

Gill-slits narrow, the width of the third 1.8 in the distance between the upper angles of the first and fifth and seven tenths more than the eye-diameter; last two gill-slits above the pectoral.

First dorsal originating a little behind the inner angle of the pectoral, its inner lobe not quite reaching the vertical from the origin of the ventral; second dorsal very small, its basal length 4.15 in that of the first and 3.15 in its distance from the precaudal pit; interdorsal space one ninth more than the upper caudal lobe, which is one fourth of the total length; lower lobe well developed, broad and obtuse, its length 2.35 in that of the upper. Anal terminating below the middle and 1.9 time the base of the second dorsal, inserted about four ninths nearer to the caudal than to the ventrals. Pectoral triangular, with both outer and inner angles obtuse, its width 1.25 in its length and 1.1 in the base of the first dorsal, its outer angle extending to below the anterior third of that fin. Ventral fins inserted four ninths nearer to the first than to the second dorsal.

Dark blue-gray above, lighter below, none of the fins with darker tips or borders.

*Etymology*.:—Named after Mr. Frank Henry Taylor, Entomologist to the Institute of Tropical Medicine, Townsville, N.Q., by whom the specimen was collected.

*Reg. No.* in Queensland Museum—I. 12/738.

*Range*.:—Coast of North Queensland.

*How acquired*.:—Presented to the Queensland Museum by its collector. The specimen, which is in beautiful condition, is a half grown female.

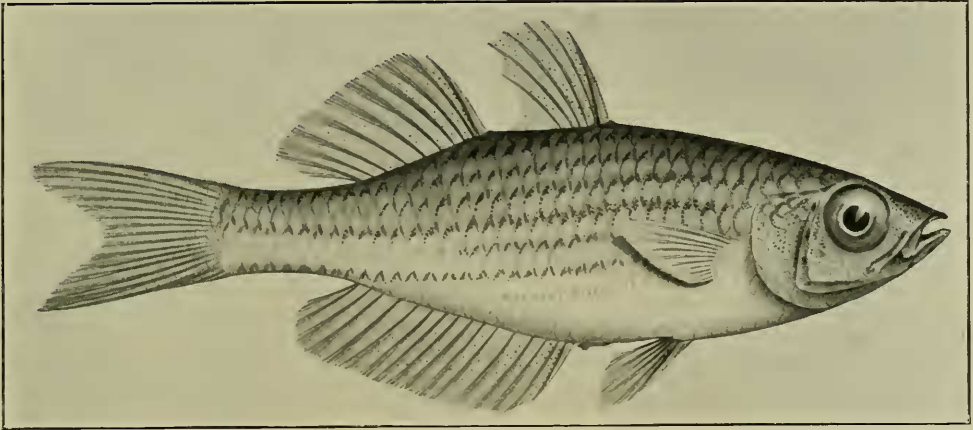
## FAMILY MELANOTÆNIIDÆ.

### MELANOTÆNIA MACCULLOCHI sp. nov.

(Plate XXIX, Fig. 1.)

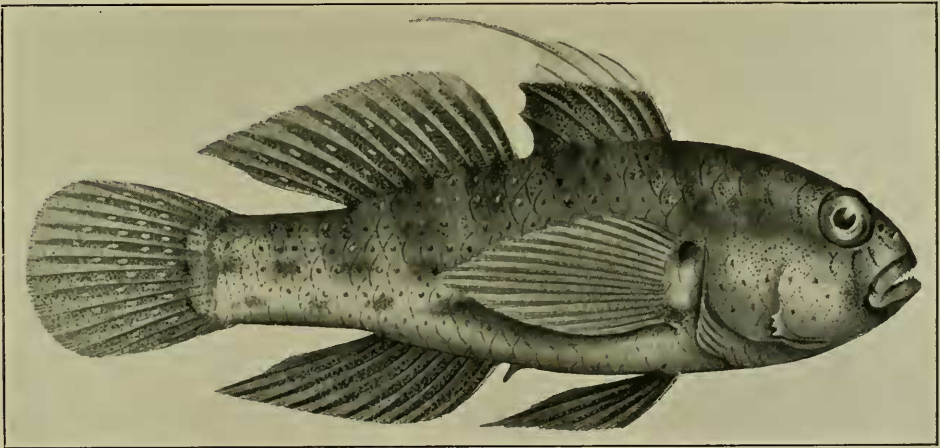
*Type locality*.:—Barron River, N.Q.

Body subovate and strongly compressed, the ventral contour rather more arched than the dorsal, its width 2.12 in its depth, which is 3.45 in its length and one tenth more than the length of the head; caudal peduncle rather slender, its least depth 1.45 in its length and 8.54 in the length of the body. Head small,



1. MELANOTENIA MACCULLOCHI Ogilby.  $2\frac{1}{2}$  Nat. Size.

A. R. McCulloch, del.



ASTERROPTERYX SEMIPUNCTATUS Rüppell. 3 Nat. Size.

A. R. McCulloch, del.



with the upper profile linear and slightly acclivous, its width 1·8, its depth 1·31 in its length, which is 3·65 in that of the body. Snout depressed and obtusely rounded anteriorly, its length 1·17 in the eye-diameter, which is 2·85 in the length of the head and 1·07 in the gently rounded interorbital width. Cleft of mouth oblique, the lower jaw prominent; maxillary somewhat dilated distally, not extending to below the eye, entirely concealed when the mouth is closed.

Scales in 32 series between the opercle and the root of the caudal, in 9 between the origin of the first dorsal and the vent. Cheeks, opercles, and occiput scaly, the rest of the head naked.

Dorsal fins with i 5, i 9 rays, the first originating above the 8th, the second above the 16th body-scale; spine of first dorsal 1·27 in the middle ray, which is 1·5 in the length of the head, and extends, when depressed, beyond the origin of the second dorsal: spine of second dorsal as long as that of the first, the rays increasing to the 3rd, which is a little lower than the first dorsal. Caudal forked, its length one fourth of that of the body. Anal with i 15 rays, originating below the middle of the first dorsal, its spine 1·43 in that of the dorsal and 1·5 in the length of the longest ray; last ray of anal not nearly reaching to the caudal. Pectoral pointed, with 14 rays, the 4th longest. 1·66 in the length of the head. Ventral inserted below the middle of the appressed pectoral, its length 1·57 in that of the head, the outer ray longest, reaching to beyond the vent.

Light brown, all the upper trunk-scales with darker borders; sides with six series of small dark spots, forming chevron bands. Opercular region with two dusky blotches. Fins colorless.

*Etymology*.—I have much pleasure in naming this pretty little species after my friend and fellow-worker Mr. Allan Riverston McCulloch, whose excellent papers on our southern and deep-water fishes have become the leading feature in Australian ichthyology.

*Reg. No.* in the Queensland Museum—I. 12/731; its length 52 millim.

*Range*.—Streams of North Queensland. Two specimens from the Barron River, near Cairns, N.Q.

*How acquired*.—Collected and donated by Mr. A. Anderson.

## FAMILY STROMATEIDÆ.

### **PSENES HILLII** sp. nov.

*Type locality*.—Cowan Cowan, Moreton Bay.

Body elliptical, the dorsal and ventral contours rounded and symmetrical, its width 2·5 in its depth, which is 2·85 to 3·05 in its length and a little more than the length of the head; caudal peduncle about one fourth longer than deep, its least depth 9·8 in the body-length. Head rather large, the upper profile feebly

rounded and but little acelivous from the forehead to the dorsal fin, its width 2.1, its depth 1.15, in its length, which is 3 to 3.25 in that of the body. Snout short and obtuse, with strongly convex, anteriorly subvertical profile, its length 1.4 in the eye-diameter, which is 2.65 to 2.9 in the length of the head; interorbital region mesially flattened, its width 3.2 in the head. Mouth small and oblique, the jaws equal; maxillary extending to below the anterior border of the eye.

Scales 5/56/19. Lateral line forming a long shallow curve to about the first third of the peduncle.

Dorsal fin originating above the opercular flap, with xi, i 20 rays, the spinous portion 1.4 in the soft; spines weak and flexible, the 5th the longest, 2 to 2.25 in the length of the head, the last spine short and isolated; soft dorsal low, about one sixth lower than the spinous. Caudal forked, the middle rays 1.4 in the upper lobe, which is 3.45 in the body-length. Anal originating below the 1st dorsal ray, with iii 19 rays, spines short, the 3rd the longest, 2.3 in the anterior rays, which are 2.4 in the length of the head. Pectoral obtusely pointed, with 21 rays, its length 3.15 to 3.25 in that of the body; 7th ray longest, reaching to the vertical from the 3rd anal ray. Ventral inserted below the last quarter of the pectoral-base, the spine short and feeble, 2.4 in the 2nd and longest ray, which is 4.3 in the length of the body and reaches to the 2nd anal spine.

Gill-rakers short and slender, 7+16 on the anterior arch, the longest 1.3 in the gill-fringes and 8.6 in the length of the head.

Pale yellowish brown, every scale but especially those above the lateral line so closely crowded with dark brown dots as to give the fish a dark appearance; lower surface of head and abdomen faintly tinged with orange; cheeks and postorbital region dark brown. Dorsal fins blackish; caudal brownish; anal, pectorals, and ventrals yellow, the former narrowly tipped with white, the latter broadly with lavender.

*Etymology*.—Named after Mr. Charles William Hill, Lightkeeper at Cowan Cowan, to whom we are indebted for the specimen.

Described from two Moreton Bay examples, measuring respectively 112 and 87 millim. They were obtained at Cowan Cowan, M.B., and Southport, and the larger example, which has been chosen as the type, was presented by Mr. C. W. Hill, to whom I have great pleasure in dedicating it. Its register number in the Queensland Museum is I. 14/2165.

## FAMILY POMADASIDÆ.

### **PLECTORHYNCHUS MULTIVITTATUS** (Macleay).

*Diagramma multivittatum* Macleay, Proc. Linn. Soc. N. S. Wales, ii, pt. 4, June 1878, p. 349, pl. vii, fig. 2.

*Type locality*.—Port Darwin, Northern Territory.

Body deeply subovate and compressed, the dorsal contour much more arched than the ventral, its width 2.55 in its depth, which is 2.45 in the length









of the body and one fourth more than that of the head; least depth of caudal peduncle a little less than its length and 3.5 in the depth of the body. Upper profile of head and nape evenly rounded, with a scarcely perceptible emargination above the posterior half of the eye. The occiput and nape moderately keeled; head a little longer than deep, 3.05 in the length of the body. Snout blunt, with gently rounded profile, its length 2.5 in that of the head; nostrils small and approximate, the posterior horizontally the anterior vertically oval, the latter valvular, its distance from the eye 2.5 in that from the tip of the snout. Eye moderate, its diameter 3.4 in the length of the head and 1.33 in that of the snout; interorbital region convex, its width a little less than the eye-diameter and 3.6 in the length of the head. Upper jaw slightly the longer; maxillary extending to below the anterior border of the eye, its length 3 in that of the head. Depth of preorbital 1.45 in the eye-diameter, which is 1.3 in the depth of the cheek. Angle of preopercle broadly rounded and feebly denticulate, the hinder limb more strongly, evenly, and closely armed, the lower entire; opercle with a short, stout, concealed spine; post-temporal serrated.

Scale formula  $14\frac{2}{3}/26$ ; l.l. tubes 55. Many of the scales on the tail, especially those near the lateral line, provided with several squamulae. Head, except the snout in front of the nostrils, the lips, and the mandibles scaly, the opercular scales largest; three pair of open pores on the lower jaw inferiorly. Spinous dorsal with a low scaly sheath; soft dorsal and anal with a broad basal scaly band and the rays scaly nearly to the tip.

Dorsal fin xii 20, originating above the latter half of the opercle; spinous dorsal with rounded outline; spines moderate, the first 1.6 in the second and 2.3 in the fourth and longest, which is 2.25 in the length of the head and but little longer than the adjacent spines; thence it decreases gradually to the last, which is a little shorter than the penultimate and 1.25 in the fourth: soft dorsal a little longer than the spinous, with gently rounded outline, the middle rays longest, scarcely longer than the fourth spine. Caudal emarginate, the middle rays 1.33 in the upper lobe, which is 3.85 in the body-length. Anal iii 7, originating below the eighth dorsal ray, the second spine stronger and slightly longer than the third, 2.45 in the length of the head and 1.4 in the second and longest ray, which considerably exceeds the height of the soft dorsal. Pectoral short and pointed, extending to below the penultimate dorsal spine, its length 1.5 in that of the head. Ventral pointed, longer than the pectoral, 1.33 in the length of the head; outer ray longest, reaching the vent.

Gill-rakers short and stout, 12+20, the longest 4 in the eye-diameter, and about one third of the longest fringes. Vent five sevenths of an eye-diameter in advance of the anal fin.

Silver-gray, darkest on the back and head, where there is a distinct admixture of blue; body with 16 irregular brown bands, the first pair forming the borders of an elongate ellipse between the occiput and the anterior dorsal spines; the next 9 bands cross the head at different angles, the 5th, 6th, and 7th passing through the eye; these bands unite on the occiput, forehead, and snout, are as wide or a little wider than the interspaces, and being roughly parallel to the first band and to one another, form ever-widening ellipses, the continuity of which is only broken by the increasingly greater obliquity of the bands from the front; beyond the 7th band, which meets the dorsal ridge below the 4th dorsal, the obliquity decreases; the last six bands originate on the body, the anterior pair meeting the soft dorsal, the middle pair uniting on the peduncular ridge, the last pair, which are horizontal, forked posteriorly, the inner branches coalescing on the base of the caudal, the outer pair curved and converging behind; the bands which impinge upon the soft dorsal extend over its scaly sheath, but with these two exceptions the fins are yellowish gray, as also are the abdominal, thoracic, and mandibular regions.

*Etymology*:—Latin: *multus*, many; *vittatus*, banded.

*Reg. No.* in the Queensland Museum—I. 13/1506.

*Range*:—Of this species three examples only are known to me—namely, Macleay's two, from which his description was drawn up, and which were collected for him by Spalding at Port Darwin, Northern Territory, and the present specimen from Darnley Island. It is true that Kent includes it in his "Classified List of Queensland Food Fishes" (Great Barrier Reef, p. 369), but this list is in every way so unsatisfactory that no reliance can be placed upon it.

*How acquired*:—Presented to the Queensland Museum by Dr. J. R. Tosh.

*Remarks*:—The differentiation of the banded *Plectorhynchi* is admittedly difficult, and is not rendered easier to the student, who has but a limited series on which to work, by the knowledge, as demonstrated by Bleeker,<sup>1</sup> that the number of the body-bands and the ornamentation of the fins varies with the age of the individual. Macleay considered his fish to be affine to *Plectorhynchus hamatochir*<sup>2</sup> and *P. polytenia*.<sup>3</sup> The latter may at once be dismissed, but its relationship is very close to *P. goldmani*,<sup>4</sup> which was founded on an immature fish, the adult of which was subsequently named *P. hamatochir*.<sup>5</sup> Our species,

<sup>1</sup> Atlas Ichth., viii, 1876, p. 14 et alibi.

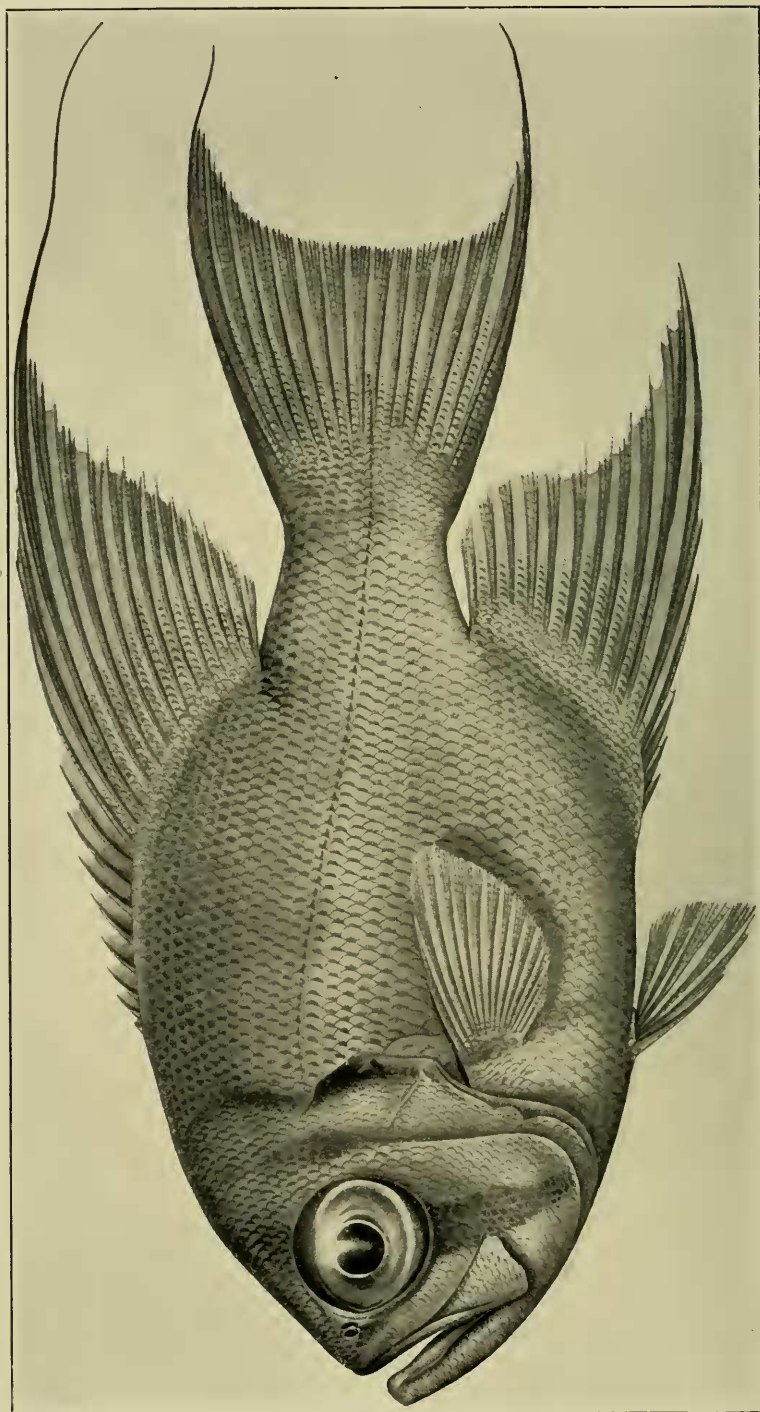
<sup>2</sup> Nat. Tijds. Nederl. Ind., vi, 1854, p. 175: Ternate.

<sup>3</sup> Ibid., iii, 1852, p. 755: Macassar.

<sup>4</sup> Ibid., iv, 1853, p. 602: Ternate (*Goldmanni* in errore; see *ibid.*, vi, p. 175).

<sup>5</sup> Jordan & Seale (Fishes of Samoa, No. 672) revert to this name, but as I cannot find any mention of it prior to 1854 I adhere to the name adopted by Bleeker in the Atlas Ichthyologique.





REGANICHTHYS MAGNIFICUS Ogilby. ♂ Nat. Size.

A. R. McCulloch, del.

